



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/764,838

01/26/2004

Dennis L. Hammond

APX-12571.001

6895

7609

7590

03/07/2006

RANKIN, HILL, PORTER & CLARK, LLP
925 EUCLID AVENUE, SUITE 700
CLEVELAND, OH 44115-1405

EXAMINER

MAI, NGOCLAN THI

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/764,838	Applicant(s) HAMMOND, DENNIS L.	
	Examiner Ngoclan T. Mai	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-14,16-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-14,16-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1742

DETAILED ACTION

1. The terminal disclaimer filed on 12/21/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,679,935 has been reviewed and is accepted. The terminal disclaimer has been recorded.
2. Applicant's arguments with respect to claims 1, 5-8, 10-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 8, 13, 14, 16-20 are rejected under 35 U.S.C. 102(b) as being by Rutz et al. (U.S. Patent No. 5,154,881, nor Rutz).

Rutz discloses a composition for making sintered metal component (i.e., use in powder metallurgy) comprising an iron-based powder, graphite and a solid lubricant such as Advawax ® 450 amide, col. 4, lines 17-25. Note that the solid lubricant is the same as the lubricant disclosed in claim 8.

While Rutz does not specifically teach at least a portion of said solid lubricant converting to a liquid phase upon application of pressure to said composition, the solid lubricant disclosed by the reference is the same lubricant recited in claim 8, it therefore capable of converting to liquid phase upon application of pressure. "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior

Art Unit: 1742

art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)."

Regarding claim 3, Rutz teaches solid lubricant in the amount of 0.1 to 10% by weight can be used, col. 5, lines 21-44.

As for claims 14 and 16, since the composition taught by Rutz contain solid lubricant and the graphite powder, which is the same as the claims, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited references. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re Best, 195 USPQ 430 and MPEP § 2112.01.

As for claims 18-20, since Rutz teaches the same method employing the same material as claimed, the action or the properties of the graphite powder, i.e., promote liquid phase sintering disclosed by the claims as a resulted of the process would inherently be possessed by the teachings of the reference.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5-14, 16-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schofalvi et al (US 2003/0220424, now Schofalvi) in view or Rutz.

Art Unit: 1742

Schofalvi discloses a powder metallurgy composition comprising metal powder, a binder composition which comprises an aliphatic polyester polymer, an ethylenebisamide wax, and a guanidine wetting agent and a debinding accelerator, para. [0012], [0124]-[0125].

The difference between the claims and Schofalvi is that Schofalvi does not teach graphite powder. However it is known in the art to add graphite powder as an alloying agent to metal powder to provide strength to the product produced from these powders, see Rutz, col. 2, line 65 to col. 3, line 2 and col. 6, line 17-25. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include graphite powder in powder metal composition taught by Schofalvi to provide improvement in strength of the final product.

Although Schofalvi does not specifically teach at least a portion of said solid lubricant converting to a liquid phase upon application of pressure to said composition, however, since the binder composition taught by Schofalvi contains the same ingredients as taught, at least a portion of the binder composition is inherently converted to a liquid phase upon application of pressure as recited in claim 1 or is capable of forming liquid phase upon application of pressure as recited in claim 13. "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)."

Regarding claims 5 and 9, the limitations recited in the claims are disclosed in paragraphs [0040] and [0131].

Regarding claim 7, the limitation is disclosed in paragraph [0078]. Note that ACRAWAX ®C is a synthetic wax.

Art Unit: 1742

As for claim 8, the ethylenebisamide wax taught by the reference read on the claimed amide wax.

As for claims 10-12, the limitation is disclosed in paragraphs [0041]- [0043].

Regarding claims 14 and 16, since the binder composition and the graphite powder taught by Schofalvi in view of Rutz are the same as the claims, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited references. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re Best, 195 USPQ 430 and MPEP § 2112.01.

As for claim 17, Schofalvi discloses the claimed limitation in paragraph [0149]-[0160].

As for claims 18-20, since Schofalvi teaches the same method employing the same material as claimed, the action or the properties of the polar powder disclosed in the claims as a result of the process would inherently be possessed by the teachings of the cited reference.

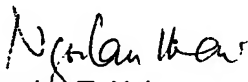
Regarding claim 22, Schofalvi discloses the amount of binder composition is from 1 vol.% to 10 vol.%, para [0122]. Although Schofalvi discloses the amount of the binder composition in vol. percent, it is the examiners position that, when converted to weight percent, this amount inherently encompasses the claimed amount absent evidence to the contrary.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ngoclan T. Mai
Primary Examiner
Art Unit 1742

n.m.